

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. Contract ID Code Firm-Fixed-Price		Page 1 Of 23	
2. Amendment/Modification No. PZ0009		3. Effective Date 2007MAY31		4. Requisition/Purchase Req No. SEE SCHEDULE		5. Project No. (If applicable)	
6. Issued By U.S. ARMY TACOM LCMC AMSTA-AQ-ADEC ELAINE NELSON (586)574-8284 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: ELAINE.NELSON1@US.ARMY.MIL		Code W56HZV		7. Administered By (If other than Item 6) DCMA CHICAGO 1523 WEST CENTRAL ROAD BLDG 203 ARLINGTON HEIGHTS IL 60004-2451 SCD B PAS NONE ADP PT HQ0339		Code S1403A	
8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code) CNH AMERICA LIMITED LIABILITY 700 STATE STREET RACINE, WI 53404-3343 TYPE BUSINESS: Large Business Performing in U.S.				<input type="checkbox"/>		9A. Amendment Of Solicitation No.	
						9B. Dated (See Item 11)	
				<input checked="" type="checkbox"/>		10A. Modification Of Contract/Order No. W56HZV-05-D-0285	
						10B. Dated (See Item 13) 2005JUN28	
Code 10988		Facility Code					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendments: (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. Accounting And Appropriation Data (If required) NO CHANGE TO OBLIGATION DATA							
13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS							
KIND MOD CODE: L It Modifies The Contract/Order No. As Described In Item 14.							
<input type="checkbox"/>		A. This Change Order is Issued Pursuant To: The Contract/Order No. In Item 10A. The Changes Set Forth In Item 14 Are Made In					
<input type="checkbox"/>		B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).					
<input checked="" type="checkbox"/>		C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of: MUTUAL CONSENT OF THE PARTIES					
<input type="checkbox"/>		D. Other (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return _____ copies to the Issuing Office.							
14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SEE SECOND PAGE FOR DESCRIPTION							
Contract Expiration Date: 2010JUN30							
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. Name And Title Of Signer (Type or print)				16A. Name And Title Of Contracting Officer (Type or print) TOD V. MILLER TOD.V.MILLER@US.ARMY.MIL (586)574-6802			
15B. Contractor/Offeror _____ (Signature of person authorized to sign)		15C. Date Signed		16B. United States Of America By _____ /SIGNED/ (Signature of Contracting Officer)		16C. Date Signed 2007MAY31	
NSN 7540-01-152-8070 PREVIOUS EDITIONS UNUSABLE				30-105-02		STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243	

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 2 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

SECTION A - SUPPLEMENTAL INFORMATION

NOTE: MODIFICATION P00008 WAS NEVER USED.

The purpose of this Supplemental Agreement, Modification PZ0009 to Contract W56HZV-05-D-0285 is to:

1. Definitize CLIN 2019AA, for the Add on Armor (AoA) effort on the High Mobility Engineer Excavator (HMEE Type III)for \$1,333,856.00 initiated under Modification P00006 for a ceiling price of \$1,796,860.00. This definitized amount includes the following:

- CLIN 2019AA: Design and Development,
- CLIN 2020: Data Items:
- A035 Technical Information Report Trade-Off Analysis
- A036 Developmental Design Drawings/Models and Associated List
- A037 Product Drawings/Models and Associated List
- A038 Preparation of Digital Technical Information for Page-Based Technical Manuals
- A039 Integrated Master Schedule (IMS)
- A040 Safety Assessment Report.

2. CNH America, LLC agrees to the following schedule:

Start of Work Meeting: 17 Nov 2006 - completed

PDR: 17 Nov 2006 - completed

CDR: 15 Dec 2006 - completed

Prototype (A kit) for ballistic and blast test: 16 Mar 2007 - completed

Prototype (A and B kit) for automotive test: 16 Mar 2007 - completed

Draft Install Instructions submitted to TACOM: 20 Dec 2006 - completed

Contractor Support of Government Test: 31 July 2007

3. Change dates in the schedule in the 252.217-7027, Contract Definitization clause.

4. As a result of this action, the value of the contract remains unchanged and all other terms and conditions remain in full force and effect.

*** END OF NARRATIVE A 0009 ***

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 3 of 23
--------------------	----------------------------------------------------------------------------------------	--------------

Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
2019AA	<p>SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS</p> <p><u>DESIGN AND DEVELOPMENT OF UP-ARMORED BHL</u></p> <p>\$1,333,856.00 is the definitized amount for the Add-on-Armor effort for an Up-Armored Backhoe Loader (BHL) IAW Section C, Scope of Work, paragraph C.17.</p> <p>(End of narrative C001)</p>	1	LO		\$1,333,856.00
2020	<p><u>DATA ITEMS</u></p> <p>SECURITY CLASS: Unclassified</p>				
A035	<p>TECHNICAL INFORMATION REPORT TRADE-OFF ANALYSIS PER CDRL A035 AND C.17.2.3</p>	1	LO	\$ ** NSP **	\$ ** NSP **
A036	<p>DEVELOPMENTAL DESIGN DRAWING/MODELS AND AND ASSOCIATED LIST PER CDRL A036 AND C.17.2.6</p>	1	LO	\$ ** NSP **	\$ ** NSP **
A037	<p>PRODUCT DRAWINGS/MODELS AND ASSOCIATED LISTS PER CDRL A037 AND C.17.2.7</p>	1	LO	\$ ** NSP **	\$ ** NSP **
A038	<p>PREPARATION OF DIGITAL TECHNICAL INFORMATION FOR PAGE-BASED TECHINCAL MANUALS PER CDRL A038 AND C.17.2.9.1</p>	1	LO	\$ ** NSP **	\$ ** NSP **
A039	<p>INTEGRATED MASTER SCHEDULE (IMS) PER CDRL A039 AND C.17.3.1</p>	1	LO	\$ ** NSP **	\$ ** NSP **
A040	<p>SAFETY ASSESSMENT REPORT PER CDRL A040 AND C.10 & C.17.5</p> <p>(End of narrative B001)</p>	1	LO	\$ ** NSP **	\$ ** NSP **

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 4 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 Hardware Deliveries

C.1.1 The contractor shall manufacture and deliver the High Mobility Engineer Excavator (HMEE) Type III. The HMEE Type III shall be as identified in the TIQ (at Attachment 2) and as modified to meet all the technical requirements of Purchase Description (PD) "HMEE Type III" PD No. ATPD-2346. Delivery Orders will specify the quantity, delivery dates, destinations, and paint color. All hardware listed in C.1.2, C.1.3, and C.1.4 shall be included in the unit price of the vehicle.

C.1.2 Basic Issue Items (BII)

BII are those minimum items essential to place the HMEE Type III in operation, to operate it, and to perform routine operator maintenance and emergency repairs which cannot be deferred until completion of an assigned mission. These may include those select common and special purpose tools, Operator publications, and safety equipment (for example fire extinguishers) authorized for the HMEE Type III.

These will be separately listed by NSN in a table as an appendix in the operator's manual. The contractor shall provide the BII listed below, which shall be overpacked (boxed and strapped to the vehicle) with each vehicle.

C.1.3 Initial Service Package

The contractor shall overpack (box and strap to the vehicle) an Initial Service Package (ISP) with each vehicle. The ISP shall consist of all service parts/items required to meet warranty service intervals and perform the first scheduled maintenance. The contractor shall mark each item with the nomenclature and part number to ensure the correct application. The ISP consists of the following parts.

C.1.4 Component of End Items (COEI)

COEI are those components that are part of the end item but which must be removed from the HMEE Type III and separately packaged for military transportation. These will be separately listed by NSN in a table as an appendix in the operator's manual. The contractor shall overpack the list and the components with each vehicle.

C.2 Data

The contractor shall deliver all data in English in accordance with the requirements in Exhibit A. All data delivered under this contract shall be submitted electronically via diskette or electronic mail in MS Office compatible format.

C.3 Meetings And Reviews

C.3.1 The contractor and government will periodically have meetings and reviews during this contract's performance period, as outlined in C.3.2 below. The objectives of these meetings are to review progress and provide guidance on technical, logistics, contractual or other issues that come up during performance. Before meetings, the participants shall agree upon an agenda. At the conclusion of each meeting, we will jointly write and agree on a summary of the discussions. The summary will identify all action items assigned for both parties to accomplish, along with a completion date for each action item, and all actions requiring Contracting Officer approval. When meetings are at the contractor's facility, the contractor will make the following available for the government's use: production or other required versions of the HMEE Type III needed for viewing; required technical, logistics or other documentation (including drawings, computer data bases, publications, and other required data); and computer resources, as needed.

C.3.2 The contractor shall participate in following meetings:

a. Start-of-Work Meeting:

A Start of Work meeting will be held at TACOM or the contractor's facility within 15 days of contract award. This meeting may last up to three days. The contractor shall present its plan to manage and develop logistics products and services. The meeting will focus on reviewing the following;

- Contract terms and conditions
- All data requirements
- Required specifications
- Schedule
- Test requirements
- Logistics requirements:

Publications and New Equipment Training requirements will be discussed. Operator and maintenance functions and what constitutes reparable items will be discussed. The government will also provide provisioning guidance for documenting and submitting provisioning data. The government and the contractor shall jointly develop an ILS schedule.

b. Pre-Test Meeting, to review and discuss testing, support, and training. This meeting shall be held 10 days prior to beginning government First Article Test (FAT) at Aberdeen Proving Ground, MD, and shall last one day.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 5 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

c. Program Status Reviews:
Program Status Reviews (PSRs) will be conducted approximately every 90 days until Full Material Release is achieved, starting 90 days after the Start of Work meeting until completion of all data deliverables. The meetings will cover the contractor's production status, data deliverable status, and progress on all logistics requirements. Supportability Integrated Product Team (SIPT) meetings will be part of the PSRs. Unless the PCO specifies otherwise, reviews will be held at US Army Tank-automotive and Armaments Command, Warren MI, and they will last up to two days. The government and contractor will jointly schedule the meetings and establish the agenda.

d. In-Process Reviews (IPRs):
The government may request periodic IPRs at the contractor's facility to identify improvements to your manuals, show progress to date, or review data or QA process.

e. Provisioning Conference: Provisioning Conferences will be held in accordance with C.6.2.4.2.

C.4 Vehicle Configuration Changes

The contractor shall be responsible for maintaining configuration control of the HMEE Type III. The contractor shall establish a production configuration baseline after successful completion of both the contractor's and the government's portions of the FAT. This baseline will identify and document the functional and physical characteristics of the HMEE Type III. It is the government's intent to standardize the vehicle configurations. The government acknowledges that the contractor may want to offer to the government configuration changes being introduced to its commercial production during the term of this contract. However, it's important for the government to assess the impact of any proposed vehicle changes to the logistics and technical requirements established for this program. The contractor is therefore required to notify the government prior to implementing any configuration changes that impact form, fit, or function in accordance with CDRL A001. If the proposed changes are not acceptable to the Government, then the government can elect to place no additional orders under this contract, and the government will be under no further obligation pursuant to the clause at FAR 52.216-21, "Requirements", to order any additional quantities of vehicles. The Government will issue a no-cost cancellation of the contract.

C.4.1 Engineering Changes - Contractor Initiated

C.4.1.1 Requirement for Submittal

The contractor shall submit a notification of change for any configuration change, which impacts form, fit or function to the Contracting Officer at least 60 days before the proposed application date. The notifications shall include the following:

- a. Rationale to support the necessity of making the change;
- b. Any test results, planned testing, or other information to show acceptability;
- c. Identification of the affected parts and assemblies, drawings, sketches, calculations, and other data necessary to define the change you are proposing;
- d. Identification of any logistics impact to include changes to manuals, provisioning, maintenance procedures, repair parts, special tools and test equipment, packaging, and transportation;
- e. Any proposed decrease in contract price; and
- f. Identification, by serial number, of the systems affected.

C.4.1.2 Government Review

The government may require the contractor to perform additional tests to verify acceptability of any proposed change. The government will determine the extent of testing up to and including a complete FAT for that change. The contractor will perform the tests at no additional cost to the government.

C.4.1.3 Responsibility for Failure Due to Changes

The government's acknowledgement of the contractor's change does not relieve the contractor from its responsibility to furnish all items in conformance with the contract performance requirements.

C.4.1.4 Responsibility for Cost Changes

The responsibility for cost of changes is as follows:

- a. This is a firm-fixed-price contract. Therefore, there will be no price increases as a result of a contractor initiated configuration change, including model changes. Anticipated model changes shall be priced out at the time of proposal submission.
- b. The government is not responsible for additional testing or software costs associated with any changes the contractor submits.
- c. When a change results in reduced contractor costs, the government would accept any equitable reduction in contract price offered

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 6 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

by the contractor.

d. The government is not liable for any costs the contractor may incur, due to delay in contract performance, as a result of any of the contractor's requests for change.

C.4.1.5 Responsibility for Data

Within 45 days of making the change, the contractor shall submit, at no cost to the government, revisions to all affected contractual data deliverables, whether they affect form, fit, or function or not.

C.4.1.6 Configuration Change Report

For contractor initiated configuration changes, the contractor shall notify the government of the following: old part number, new part number, vendor CAGE code, and Additional Reference Number (vendor part number) in accordance with CDRL A001. The contractor shall submit the report with two sections, one for form/fit/function changes and one for non-form/fit/function changes.

C.4.1.7 Definitions

The following are definitions of form, fit, and function:

- a. Form: For hardware, form denotes the shape, size, dimensions, mass, weight, and other physical parameters that uniquely characterize an item. For software, form denotes the language and media.
- b. Fit: The ability of an item to physically interface or interconnect with or become an integral part of another item.
- c. Function: The action or actions that an item is designed to perform.

C.4.2 Reserved

C.4.3 Reserved

C.5 Vehicle Hand-Off

The contractor will be responsible to hand-off all equipment deliverable under this contract to each gaining unit. The contractor shall perform the hand-off and activate the vehicle warranty. The contractor shall deliver all the vehicles ready to operate prior to New Equipment Training. The hand-off effort includes:

- a. Re-assembly of the vehicle to a fully operational configuration if the vehicle is shipped with any components removed. All tools and equipment required to complete the re-assembly will be the contractor's responsibility.
- b. Inventory of any material shipped with the vehicle, e.g., technical publications, special tools, initial service packages. (If desired, the inventory may be done concurrently with the unit's inventory.)
- c. Provide one-hour familiarization to 6 -8 people from the receiving unit on first machine delivered so they can safely move the vehicle until full training is conducted. Familiarization includes operator start-up, operating and shut down procedures, safe operations, and daily and weekly service locations and checks.
- d. Activation of the warranty, which includes stamping the effective date (date of delivery to gaining unit) on the vehicle warranty data plate, discussing with the unit the terms and details of warranty administration, and pointing out the warranty information included in the TMs. The contractor shall prepare a report which contains the warranty implementation date by vehicle serial number, shipping destination, and DODAAC in accordance with CRDL A003.

C.6 Logistics

C.6.1 Logistics Management

The contractor shall manage and develop the logistics data for the program, and (co-chair) government scheduled Supportability Integrated Product Team (SIPT) meetings as part of the PSR. (See C.3.)

C.6.2 Integrated Logistics Support (ILS) Development

The contractor shall use MIL-PRF-49506, Performance Specification, Logistics Management Information (LMI), dated 11 Nov 96, for use in identifying content, delivery and related guidance for logistics data.

C.6.2.1 Maintenance Planning

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 7 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

The contractor shall conduct Maintenance Planning to determine the maintainability characteristics of the HMEE Type III system. The analysis shall be documented in the contractor's format as an LMI summary entitled "Maintenance Analysis", and will identify the maintenance functions, level of maintenance, manpower, and support equipment required for each repairable item. The analysis will be in end item hardware breakdown sequence, and will also identify Functional Group Codes in accordance with TB 750-93-1 (with Change 5, dated 27 Jun 1983), for each item. Instructions are contained in Exhibit K (Maintenance Analysis). The LMI summary shall be delivered IAW CDRL A004.

C.6.2.2 National Maintenance Work Requirement (NMWR) Component Candidates and Analysis

C.6.2.2.1 NMWR Candidate List

The Government's preliminary NMWR component candidate list consists of repairable assemblies such as:

- Engine
- Transmission
- Axles
- Final Drives
- Pumps (Hydraulic, Fuel Injection, Power Steering, etc\'85)
- Electronic Control Modules/Units

The contractor shall deliver a NMWR candidate listing consisting of all parts coded for repair at the National Level of Maintenance or above and for which complete repair instructions are not included in the contractor's Maintenance Manuals in accordance with ELIN A005. The source data for this list will be the Maintenance Analysis, performed per paragraph C.6.2.1. The contractor shall remove components from consideration costing less than \$1000 (US). The government will review, make changes as necessary, and provide the approved NMWR candidate list to the contractor.

C.6.2.2.2 Remanufactured NMWR Component Candidates

The contractor shall indicate for each NMWR candidate whether the item is currently available as a remanufactured, rebuilt or otherwise refurbished component, as part of their response to the NMWR candidate listing. The contractor shall provide the following information:

- a. if directly available from contractor through same supply and distribution channels as all other parts/components.
- b. standard to which the item is to be remanufactured, rebuilt or otherwise refurbished:
 - i. "like-new" condition, using only new components,
 - ii. using nonstandard (oversize/undersize) bearings or other components which may vary from the original component configuration.
- c. warranty, if different from new component
- d. method used to distinguish between new vs. rebuilt/remanufactured component, such as part number difference, etc.

C.6.2.2.3 NMWR Data Summary

The contractor shall perform a data summary for the components on the government approved NMWR candidate list. The summary may be in the contractor's format, and shall be documented in accordance with Exhibit J (NMWR Candidate List). The NMWR Data Summary shall be delivered in accordance with CDRL A006.

C.6.2.2.4 NMWR Final List. The Government will use the data summary to compare the cost to buy new vs. the cost to rebuild, establish inventory levels, and determine how often this item will need to be repaired. The Government will review this data and finalize the NMWR Candidate listing to identify which items are to have NMWRs developed.

C.6.2.3 The Army Maintenance Management System (TAMMS)

The contractor shall prepare a DA Form 2408-9, Equipment Control Records (Government furnished form) for each vehicle it delivers. The contractor shall prepare the form in accordance with DA PAM 738-750 to report shipment of the HMEE Type III from the acceptance point to the initial accountable government consignee. A blank copy of the form is enclosed at Exhibit B. The contractor shall have the Defense Contract Management Command (DCMC) Quality Assurance Representative (QAR) complete blocks 22 and 23 as part of the government's final inspection. After the DCMC QAR completes blocks 22 and 23, the contractor shall distribute the DA Form 2408-9 as follows:

- a. Submit the control copy (copy #1) within five working days to:

Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY

Director
U.S. Army Materiel Command's Logistic Support Activity
ATTN: AMXLS-MR
Redstone Arsenal, AL 35898-7466

b. Submit National Maintenance Point (NMP) copy (copy#2) within five working days to:

Commander
U.S. Army Tank-automotive and Armaments Command
ATTN: AMSTA-LC-CJCB
Mail Stop 326
6501 East 11 Mile Rd.
Warren, MI 48397-5000

c. Place Log Book copy (copy #3) in a dry, protected location, secured in the operator station, and shipped with each vehicle.

C.6.2.4 Provisioning

C.6.2.4.1 Provisioning Parts List

The contractor shall develop and deliver LMI (Provisioning Parts List (PPL)) as specified in Exhibit C (LMI data worksheet) for all separable parts, special tools, and AAL identified on the HMEE Type III in accordance with MIL-PRF-49506, DI-ALSS-81529, and CDRL A007 and Exhibit C. The government may request the contractor to modify/add/delete any of the contractor's proposed recommendations on all parts and special tools. The contractor shall provide these modifications/additions/deletions at no additional cost to the government.

C.6.2.4.2 Provisioning Data

Each incremental submission shall have at least 800 lines, but no more than 1500 lines. The contractor shall receive authorization from the government prior to submitting less than 800 lines in an increment. Each incremental submission shall include at least one major assembly. All submissions will be labeled initial, changes, deletions or any combination of the three transactions.

C.6.2.4.3 Engineering Data For Provisioning (EDFP) For Operator's Manual

The contractor shall prepare the EDPF, i.e. illustrations, in accordance with DI-ALSS-81529 for all BII, and COEI items in accordance with CDRL A008. A separate illustration is required for each item. After the government approves each illustration as being suitable for NSN assignment, the contractor shall submit the illustration on a CD ROM, .PDF file. For industry standard common hardware, include descriptive nomenclature. "Make from" items made from industry standard components shall include additional descriptive nomenclature. Examples of additional descriptive information include, at a minimum, the physical dimensions and all classifications (i.e. hardness, grade, thread type, surface finish, coatings, industry specifications and etc.). Common hardware includes nuts, bolts, washers, O-rings, cotter pins, C-clips, clevis pins, lamp bulbs, etc.

C.6.2.4.4 Engineering Data For Provisioning (EDFP)

The contractor shall prepare the EDPF, i.e. illustrations, in accordance with DI-ALSS-81529 in LMI Provisioning Line Item Sequence Number (PLISN) sequence for all items that when assembled make up the end item in accordance with CDRL A009. A separate illustration is required for each PLISN. The contractor shall make available illustrations for each item being provisioned, to include the top assembly drawing, at each provisioning conference for government review. Illustrations are not required for items accompanied by a copy of provisioning screening (e.g. FLIS, WEBFLIS, or by batch submittal part numbers to DLIS) which indicates this item has previously been assigned a valid national stock number. After the government approves each illustration as being suitable for NSN assignment, the contractor shall submit the illustration on a CD ROM, .PDF file. For each item to be provisioned and supported by an illustration, the contractor shall provide the following information:

- a. Commercial and Government Entity Codes (CAGEC)
- b. Part Number
- c. PLISN (Provisioning Line Item Sequence Number)
- d. Provisioning Contract Control Number
- e. For industry standard common hardware include descriptive nomenclature. "Make from" items made from industry standard components shall include additional descriptive nomenclature. Examples of additional descriptive information include, at a minimum, the physical dimensions and all classifications (i.e. hardness, grade, thread type, surface finish, coatings, industry specifications and etc.). Common hardware includes nuts, bolts, washers, O-rings, cotter pins, C-clips, clevis pins, lamp bulbs, etc..

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 9 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

C.6.2.4.5 Provisioning Screening

The contractor shall conduct provisioning screening on each item on the PPL for standardization or NSN identification in accordance with CDRL A010. This screening will be used to select valid part numbers, NSNs, and current unit of measure/issue prices for provisioning purposes. The screening results must be available to review at each provisioning conference. The contractor shall conduct provisioning screening using FLIS, WEBFLIS, or by batch submittal part numbers to DLIS. FEDLOG and HAYSTACK are no longer acceptable for provisioning screening. For additional information on FLIS and batch submittals to DLIS, refer to the Provisioning Screening User Guide located on the internet at www.dlis.dla.mil. For additional information on WEBFLIS, go to www.dlis.dla.mil/WebFlis. There are two versions of WEBFLIS: Public Query and Restricted/Sign-on. Anyone with access to the Internet may access the Public Query version. The Restricted/Sign-on version requires a valid userid/password to access the system. Userids may be obtained by filling out a registration form. The registration forms are found on the DLIS web site. After accessing the Home Page, go into the Forms and Publications section and select the registration form for WEBFLIS. There are two forms available - one for government workers and one for government sponsored contractors.

C.6.2.4.6 Provisioning Conference

Provisioning Conferences will be held at TACOM. The contractor shall make available two hardcopies of LMI/PPL data and a hardcopy of the Engineering Data for Provisioning (EDFP) illustrations. All submissions of the LMI/PPL data must be compatible with our Commodity Command Standard System (CCSS)/Provisioning On Line System in accordance with Automated data Systems Manual (ADSM) ADSM 18-LEA-JBE-ZZZ-UM-06.

C.6.2.5 Packaging Development

C.6.2.5.1 The contractor shall, for items pertaining to the HMEE Type III, develop and provide packaging data for all TACOM managed provisioned items (i.e., "P" coded items other than "PR" or "PZ"), minimal logistics data for non-TACOM managed items (e.g., unit pack size, weight, and cube), and maintain and update packaging data for each provisioned item. The contractor shall assess changes to engineering and logistic data for impact on packaging data, and shall provide packaging impact statements with Engineering Changes. For each change, the contractor shall determine if additional items require packaging data and if existing packaging data requires revision. The Contractor shall provide new and revised packaging data (as part of the Logistics Impact Statement paragraph C.4.1.5) for each Engineering Change if sufficient data is not in the TACOM packaging files. Contractor shall provide facilities, equipment, materials, and access to the provisioned items for packaging development. The contractor shall include information for each of the items, which shall be provided concurrently with each packaging data submittal, so that the government can determine the adequacy of the contractor prepared packaging analysis and data submittal. This includes item drawings/illustrations and data such as: Source, Maintenance, and Recoverability codes, Unit of Issue codes, Unit of Measure and Measurement Quantity, and copies of any applicable Material Safety Data Sheets.

C.6.2.5.2 Packaging/Logistics Data Entry

The Contractor shall develop, maintain and update packaging data IAW DI-ALSS-81529, Exhibit D (LMI Packaging Data Products), Exhibit E (LMI Packaging Data Transaction Format), and as listed on CDRL A011. LMI data is required IAW MIL-PRF-49506 and will provide for the entry of information to the computer data base known as the TACOM Packaging Data File. The TACOM approved Packaging Data Entry shall be electronically submitted in accordance with CDRL A011 in an ASCII delimited text format using commas as delimiters. Quotation marks may be used as text qualifiers but are not required.

C.6.2.5.3 Special Packaging Instructions (SPI)

The Contractor shall develop a SPI for each TACOM managed item. The TACOM managed items are expected to be mainly, but not exclusively, comprised of reparable items, and would include items such as those being considered as NMWR candidate items. Packaging processes and materials shall be described for cleaning, drying, preserving, unit, intermediate (as applicable), and exterior packing, marking, and unitization. Figures and narrative data shall be developed to describe the form, fit, and function of packaging in sufficient detail for production. The format and content of SPI shall be IAW DI-PACK-80121B and CDRL A012.

C.6.2.5.4 Validation Testing of Preservation Processing and Packaging

The Contractor shall validate packaging for each item IAW Appendix F of MIL-STD-2073-1D (Standard Practice for Military Packaging), DI-MISC-80711A, and CDRL A013. The test report shall be provided concurrently with the SPI submittal, and shall include photographic records of package and testing.

C.6.2.6 Technical Publications (CDRLs A014, A015, A016, A017, A018, A019, A033, and A034)

The contractor shall deliver manuals for the HMEE Type III in accordance with Exhibit F General Publications Requirements, Exhibit G Repair Parts and Special Tools List (RPSTL) Requirements, Exhibit J MIL-STD-40051-2 Requirements Matrix and Exhibit N Sample Warranty Technical Bulletin (TB), as specified in the related DD Forms 1423. The set of manuals for the HMEE Type III shall include tailored Commercial Off-The-Shelf (COTS) manuals with supplementation, a DA RPSTL, a Warranty TB, and Electronic Technical Manuals (ETMs) and associated editable files.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285MOD/AMD PZ0009	Page 10 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

C.6.2.6.1 COTS with Supplemental Data, DA RPSTL, Warranty TB and ETMs.

The contractor shall tailor the existing commercial manuals to reflect and support only the approved HMEE Type III configuration being procured. In addition, the contractor shall prepare a DA RPSTL, a Warranty TB and ETMs. The RPSTL text shall be pulled from the Army Provisioning Master Record (PMR) from data that the contractor provides and loads; the contractor prepared illustrations (Figures) shall be incorporated into the download. The contractor shall structure/restructure and paginate the existing COTS manuals and supplemental data into two manuals as follows:

- TM 5-2420-XXX-10 Operator's Manual
- TM 5-2420-XXX-23 Field Level Maintenance Manual (including

Unit and DS Maintenance) (may include

Sustainment level tasks)-DELETE

The separate DA RPSTL shall be identified as follows:
(NOTE: the commercial parts manual is NOT used as a deliverable under this contract.)

- TM 5-2420-XXX-23P Field Level Maintenance Repair Parts

and Special Tools List (including Unit and
DS Repair Parts) (also includes Sustainment,
Level Repair Parts)- DELETE

The Maintenance and RPSTL manuals shall be divided into volumes if the page count for one manual exceeds 1500 pages (750 sheets.) Vehicle Warranty information will be included in the Warranty TB not in the Operator (TM-10) and Field Level Maintenance Manual (TM-23).

The Warranty Technical Bulletin shall be identified as: TB 5-2420-231-14

C.6.2.6.1.1 All sustainment level maintenance tasks identified during Maintenance Analysis review shall be identified and included in the Maintenance Allocation Chart. The tasks shall not be included as a separate chapter in the back of the -23 manual.

C.6.2.6.1.2 The contractor shall integrate all Supplemental Data (SD) into the appropriate level manuals. See Exhibit F General Publications Requirements for more detailed requirements. Paragraph 3 of Exhibit F provides details on the SD requirements. Supplemental Data includes, but is not limited to:

- a. incorporating the Operator level PMCS, BII, AAL, COEI into the Operator's (TM-10) manual,
- b. incorporating the Field level PMCS and MAC into the maintenance manual (TM-23),
- c. integrating all military unique items, configuration requirements, into the appropriate level and sections of the manuals cited above,
- d. storage, transportability, preservation and packaging into the appropriate level TM, and
- e. additional supplemental data in the form of maintenance tasks resulting from Maintenance Analysis.

Operator tasks are limited to those tasks performed with tools and parts available on vehicle as BII. Special consideration may be given for some transportability data; UNIT instructions may be identified in the TM-10. A sample Warranty TB is included at Exhibit N. The government, at its discretion, will post the final DA authenticated manuals, TM-10 and TM-23 with supplementation, the TB-14, and the TM-23P on the internet for the soldiers easy access.

C.6.2.6.1.3 The contractor shall perform a 100% hands-on validation of all existing COTS manual data and supplemental data developed for integration into TM 5-2420-XXX-10 and TM 5-2420-XXX-23 manuals to ensure accuracy and completeness. The contractor shall ensure that the commercial manual data accurately reflects and supports only the HMEE Type III configuration procured by the government, including any and all changes to the configurations resulting from testing, vendor parts supply and production line changes. The contractor shall perform a 100% validation of the RPSTL. The contractor shall also perform a 100% review of the ETMs to ensure that they meet contract requirements. The contractors review of the ETMs shall be hands-on live testing, desk-top review, or a combination of these methods to ensure that the draft ETMs are fully operational so that the government can evaluate their operation, navigation, and structure. The contractor shall inform the government of its planned validation schedule, start date, time, and location of validation 30 days prior to start of the validation. This will allow the government time to attend and observe the contractor's processes.

C.6.2.6.1.4 The government intends to witness the contractor's validation and to combine its verification of the COTS manual and Supplemental Data with the contractor's validation. The contractor shall provide the necessary personnel, parts, special tools/equipment to support the combined validation/verification.

C.6.2.6.1.5 The government desires early delivery of the supplemented Operators Manual (TM 5-2420-XXX-10) and is offering an incentive accordingly. See H.12. The government also desires early delivery of the Maintenance Manual and the RPSTL, and is offering an incentive accordingly. See H.13. After contract award, if additional supplementation is required, the effort will be negotiated on an ALPHA contracting basis.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 11 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

C.6.2.6.1.6 Electronic Technical Manuals (ETMs)

The contractor shall prepare and deliver ETMs for TM 5-2420-XXX-10, TM 5-2420-XXX-23 and TM 5-2420-XXX-23P and TB 2420-231-14 and associated editable electronic files in accordance with Exhibit F General Publication Requirements and Exhibit G Repair Parts and Special Tools List Requirements.

C.6.2.6.1.7 The contractor shall correct all errors found in the commercial manuals, supplemental data, RPSTL, TB and ETMs, and electronic data files resulting from government reviews, test, and verification and the contractors validation at no additional cost to the government.

C.6.2.6.1.8 As a separate effort from the publication requirements above, deliver three complete sets of the existing COTS TMs supporting and reflecting the configuration of the HMEE Type III being procured in accordance with CDRL A019. The paper sets shall include operator, maintenance and parts data. The existing TMs can be separate or in any combination. No supplemental data or tailoring is required for this delivery. Validation is not required for this delivery. Electronic Technical Manuals (ETMs) are not required for this delivery. This is a one time delivery of existing TM sets. The government intends to review these COTS TMs to determine any SD requirements over and above the SD requirements currently identified in the contract. This review and resulting SD determination shall be performed as part of an Alpha process; any new SD requirements will be separately negotiated as part of this process. COTS Parts TM/data will be reviewed but will not be delivered elsewhere under this contract (see paragraph C.6.2.6.1 above).

C.6.2.6.1.9 The contractor shall furnish copyright releases for all commercial manuals and supplemental data to allow the Distribution Statement A: Approved for public release; distribution is unlimited" to be placed on the Operator and Maintenance TM covers and title block pages. The contractor shall insure that the government has the right to use and distribute the ETMs and electronic data files delivered under this contract.

C.6.2.7 New Equipment Training (NET)

C.6.2.7.1 Training Programs

The contractor shall develop and provide New Equipment Training course materials to support tests, demonstrations, and New Equipment Training (NET) for the HMEE Type III. The contractor shall provide the methodology to minimize the length of each training course of instruction. The contractor shall develop and conduct the following two courses of instruction to support NET:

a. Operator and Operator Maintenance

The course shall be designed for operators of the HMEE Type III, covering complete operation, safety, and Operator Preventive Maintenance Checks and Services (PMCS).

b. Field Level Maintenance and Sustainment Level Maintenance

The course shall be designed for the maintainers of the HMEE Type IIIs, and cover minimal Operation characteristics, in-depth PMCS, Vehicle System Required Services, Troubleshooting, Diagnosis and Repair of System Components to include Contractor/System Unique Control Systems, engine, fuel, transmission, axle, braking, electrical, hydraulic, pneumatic, and ancillary systems. The course shall be directed toward new technologies and items not currently in the Army system.

c. NET classes

The first NET class of each course of instruction is the Instructor and Key Personnel Training (I&KPT). All classes shall have two instructors. The I&KPT will be held at the contractor's facility, if CONUS. The I&KPT may be held at the fielding site if OCONUS. The NET training will be held at the fielding sites. Fielding sites will be at CONUS, OCONUS (non-contingency), and OCONUS (contingency) locations as specified in the Delivery Order. The contractor shall provide numerous NET classes in Kuwait, as specified in the Delivery Order. Except where specified, the requirements for CONUS and OCONUS (contingency and non-contingency) NET classes are the same. The contractor shall conduct training with the approved training materials developed under this contract. Target the courses for individuals who are instructors, operators, and mechanics. The training shall be structured to provide at least 70% "hands-on" exercise. The contractor shall provide unique and common tools, parts, training aids, materials, for all training classes. For I&KPT, the contractor may use the FAT vehicle at its facility. For NET classes in the field, the contractor may use the fielded vehicle. The contractor shall maximize use of any commercial training devices or simulators. The contractor shall also provide any replacement parts damaged during training. For CONUS and OCONUS (non-contingency) training, each class shall be no more than 40 hours in length and shall be conducted on consecutive days, Monday through Friday, eight hours per day, starting at 0800 hours each day. A maximum of 10 students will attend each class. For OCONUS (contingency) training, there is no limitation on which days during the week that the training will be held or which hours during the day it will be held. The duration of each day will be no more than 14 hours. Each delivery order will specify the training dates, locations, and number of classes. The contractor shall provide a copy of the approved training materials for each student, a student attendance report, a class critique, and a Certificate of Training. The travel costs, if necessary, will be negotiated at the time the delivery order is issued, on a firm-fixed-price basis, and not to exceed the Joint Travel Regulation.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 12 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

C.6.2.7.2 Training Data

C.6.2.7.2.1 Training Course Control Document

For each course, the contractor shall develop a Training Course Control Outline describing the course content (subject, topics, task), training material, types and duration of instruction, and resources required to conduct training in an institutional setting. The Training Course Control Outline shall contain front matter, introduction, course description data, outline of instruction summary, curriculum outline of instruction, course summary and presentation schedule. Deliver in accordance with CDRL A020.

C.6.2.7.2.2 Training Materials

The training package shall contain the elements of the training course outline prepared, delivered and finalized in accordance with CDRL A020. Prepare and deliver training materials in accordance with CDRL A021. The government will provide sample training materials and outlines at the Start of Work (SOW) meeting.

C.6.2.7.2.2.1 Course Material Format/Media & Deliveries

The contractor may submit materials developed and used for conducting Operator and Maintenance Training for Commercial Customers with Supplemental Data/Information added to meet the Army's Requirements. Training Materials may consist of contractor handbooks, in-house training material, pamphlets, training literature, utility manuals, software manuals, maintenance manuals, logic diagrams, schematics, flow block diagrams, equipment description and functional data, testing procedures, visual aids, and other documents suitable for use in development of training programs. Visual aids may consist of videos, slides, transparencies, wall charts, schematics, illustrations, pictures, drawings, and cutaways of components. The contractor shall deliver all course control documents and training materials in an editable commercial electronic format: (Microsoft Word for documents and PowerPoint for presentations).

C.6.2.7.2.2.2 ASAT Course Material Format/Media and Deliveries

The contractor shall develop the training materials using the Automated Systems Approach to Training (ASAT) software in support of course design and development. The government will provide access to the ASAT software. ASAT software can be downloaded at the ASAT homepage, <http://www.asat.army.mil>. This software will allow for interactive course design, development, pre-authoring, and authoring that is required by TRADOC. Specifically, the ASAT software supports task development, standardized critical information, and lesson plan/Training Support Package (TSP) production capabilities. Source materials may consist of those items listed in paragraph

C.6.2.7.2.2.2.1 The contractor shall deliver all course materials in an editable ASAT electronic format in accordance with CDRL A022.

C.6.2.7.2.3 Student Attendance Report

On the first day of each training class the contractor shall FAX or email a list of students in attendance to the address on the CDRL (A023). Within ten (10) days after completion of the class, the contractor shall furnish a student roster to the address on the CDRL. The roster shall include the name of the class, start and end date, instructor(s) name and signature, location of the class, student name, military rank (if military), home station address, record of daily attendance for each student, and instructor's notes. At the end of the class, each student shall complete a class critique. The government will provide a sample critique sheet and the contractor shall administer them. The contractor shall submit the completed critiques to the government along with the student roster. At the end of the class, the contractor shall present each student with a Certificate of Training. The government will provide the training certificate master file for the contractor to administer certificates to the students. The contractor may also administer a corporate certificate.

C.6.2.7.3 Training for Test Personnel for FAT (See Section E)

The contractor shall provide two days of training to support government FAT at Aberdeen Proving Ground. Training shall include proper operating procedures, equipment and instrument familiarization, safety precautions, operator and maintainer Preventive Maintenance Checks and Services (PMCS), maintenance tasks, and all necessary materials and equipment required supporting testing of the HMEE Type III. Operator's manual, and if need be, training materials shall also be provided to supplement training.

C.7 Embedded Diagnostic

C.7.1 Electronic diagnostic testability analysis

The contractor shall perform a testability analysis of the HMEE Type III diagnostic capability, to include number and types of diagnostic tests available for all HMEE Type III components, assemblies, systems, sub-systems and deliver a testability analysis IAW DI-MISC-80508A and CDRL A024. The report shall specify number and types of required Test, Measurement, and Diagnostic Equipment (TMDE), as well as a brief narrative description of the benefits to be derived from each diagnostic test. The report shall include a description of any on-board electronic diagnostic systems that may be interrogated for the purpose of maintenance and troubleshooting via an on-board diagnostic display screen. The report shall also contain all standard data, data descriptions and error codes necessary to

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 13 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

communicate with the electronic control module (ECM)/electronic control unit (ECU) and to maintain the electronically controlled subsystems. The contractor shall provide data, which specifies limits for all parameters, and how to interpret data outside limits. The contractor shall maximize the use of embedded Built-in Test (BIT) / Built-in Test Equipment (BITE) diagnostic capabilities, and fully document and support embedded system software. Any on-board data buses and diagnostic connectors shall also be identified in detail.

C.7.2 Analog Diagnostic testability analysis

The contractor shall perform a testability analysis of the HMEE Type III and deliver a testability analysis IAW DI-MISC-80508A and CDRL A024. The report shall include documentation showing complete analog fault isolation capabilities, troubleshooting methodology for the HMEE Type III. The contractor will refer to the list of proposed tests that are referenced in Appendix C, Table C-2 of the DCA Design Guide (Report # CR-82-588-003 Rev 1). The contractor can add to or delete tests from Table C-2 as necessary to best obtain HMEE Type III diagnostics. The contractor shall also provide the original equipment manufacturer's recommended minimum and maximum parameters for all Diagnostic Connector Assembly (DCA) and Transducer Kit (TK) monitored components. The contractor shall specify level of difficulty and time required to physically access test points and type of TMDE required.

C.7.3 The contractor shall provide software required to interface, retrieve, and interpret the vehicle system's diagnostic data, as identified in paragraph 3.5.1.4.1.1 of the PD unless an on-board system is provided in accordance with 3.5.1.4.1.3 of the PD. Software shall not contain license restrictions or run-time fees.

C.8 Support Equipment Tools and Test Equipment (STTE)

The contractor shall deliver a list of Support Equipment Tools and Test Equipment IAW DI-ILSS-80868 and CDRL A025. The list shall be in tabular form and shall identify special tools and test equipment not contained in U.S. Army Supply Catalogs. Supply Catalogs contain common tool sets and are listed at US Army LOGSA web site at <https://weblog.logsa.army.mil/sko/index.cfm>. Maximum use of common tools, support equipment, and TMDE normally organic to the user is preferred. The list shall provide Nomenclature, Cage Code, National Stock Number (NSN), if assigned, Part Number, level of maintenance, and price of each item on the list.

Note: New TMDE items, those not identified in U.S. Army Supply Catalogs may require special source and calibration documentation in order to update/ provide data for possible inclusion to the TMDE register (DA Pam 700-21-1). The contractor shall provide all required data for all new TMDE.

Note: The following paragraphs are included to clarify special tools for Army use. Special tools are not identified as components in a SKO SC. Special tools are:

- a. Fabricated tools that are made from stocked items of bulk material, such as metal bars, sheets, rods, rope, lengths of chain, hasps, fasteners, and so forth. Fabricated tools are drawing number controlled and documented by functional group codes in RPSTLs and located in TMs as appendices. Fabricated tools are used on a single end item.
- b. Tools that are supplied for military applications only (that is, a cannon tube artillery bore brush, BII) or tools having great military use but having little commercial application.
- c. Tools designed to perform a specific task for use on a specific end item or on a specific component of an end item and not available in the common tool load that supports that end item/unit (for example, a spanner wrench used on a specific Ford engine model and on no other engine in the Army inventory).

C.9 Transportability Report

The contractor shall submit a Transportability Report in accordance with CDRL A026 that includes data on recommended procedures for positioning and securing the HMEE Type IIIs for transport by trailer and rail car, slinging procedures for lifting the vehicles, and procedures, man-hours and all tools required for any disassembly and re-assembly when transported by highway, rail, marine and air.

C.10 Safety Engineering And Health Hazards

C.10.1 Safety Engineering Principles

The contractor shall address the Safety and Health requirements of the PD in technical reviews. The contractor shall follow good safety engineering practices in establishing the HMEE Type III design and operational procedures, to include modifications to your commercial vehicle and components. The contractor shall have a system safety program in place equivalent to Exhibit H, System Safety Program Requirement. As a minimum, the contractor shall do the following:

- a. Identify hazards associated with the system by conducting safety analyses and hazard evaluations. Analyses shall include operational, maintenance, and transport aspects of the HMEE Type III along with potential interface problems with planned subsystems.
- b. Eliminate or reduce significant hazards by appropriate design or material selection. If hazards to personnel cannot be avoided

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 14 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

or eliminated, take steps to control or minimize those hazards.

- c. Locate equipment components and controls so that access to them by personnel during operation, maintenance or adjustments shall not require exposure to hazards. Examples of hazards to be considered include: high temperature, chemical burns, electrical shock, cutting edges, sharp points, or concentrations of toxic fumes above established threshold limit values documented in the American Conference of Governmental Industrial Hygienists Threshold Limit Values and Biological Exposure Indices. All moving parts, mechanical power transmission devices, exhaust system components, pneumatic components and hydraulic components which are of such a nature or so located as to be a hazard to operating or maintenance personnel shall either be enclosed or guarded. Protective devices shall not impair operational functions.
- d. Assure that suitable warning and caution notes are included in instructions for operation, maintenance, assembly and repairs and that distinct markings are placed on hazardous components of equipment.

C.10.2 Safety Assessment Report (SAR)

As a result of system safety analyses, hazard evaluations, and any of your independent testing, the contractor shall perform and document a Safety Assessment Report (SAR) with a Health Hazard Assessment (HHA) included in the report. The SAR shall identify all safety features of the hardware, system design and inherent safety and health hazards and shall establish special procedures and/or precautions to be observed by our test agencies and system users. A health hazard is defined in DI-SAFT-80106B. Identified hazards shall have recommended engineering controls, equipment, and/or protective procedures to reduce the associated risk. It shall also outline any operations, maintenance and transport procedures needed by the test agencies and the system user. Assessments shall include consideration of the generation of hazardous wastes. The contractor shall prepare the Safety Assessment Report in accordance with CDRL A027 and DI-SAFT-80102B. The System Safety Program Guide (Exhibit H) provides guidance in the preparation of the SAR and Health Hazard Assessment (HHA). In preparing the health hazard portion of the Safety Assessment Report, the contractor shall provide a description and discussion of each potential or actual health hazard for each subsystem or component. The contractor shall include classification of severity and probability of occurrence, and when the hazards may be expected under normal or unusual operating or maintenance conditions. Include in the report copies of Material Safety Data Sheets (MSDS) for all hazardous materials incorporated into the system. Also, as part of the SAR, indicate compliance to SAE and ANSI for the vehicle type with a construction mission (Example: SAE/ANSI standards for the ROPS and hydraulics) and if applicable to Federal Motor Vehicle Safety Standards (FMVSS). Identify all data sources for the report and all hazards in the report must be identified by hazard severity, hazard probability and risk level in accordance with the System Safety Program Guide (Exhibit H). The final SAR(/HHAR) is subject to government approval. In the event the system is modified or procedural changes with regards to interfacing with the system are made after the final SAR(/HHAR) is submitted, you shall update the SAR(/HHAR) to reflect those modifications or changes.

C.10.2.1 Examples of hazards to be included in the report are:

- a. Sharp edges/moving parts.
- b. Noise. Identify any hearing protection and type required, (e.g., single, double, muffs, or plugs). Identify the 85 dB (A) noise profile around the vehicle.
- c. Electrical issues.
- d. Whole-body vibration. Provide test data or perform equivalent testing conforming to the guidelines and measuring procedures set forth in ISO2631/1 or SAE J1013.
- e. Toxic fumes (exhaust emission hazards) and hazardous materials, to include those formed by the introduction of the system, or by the manufacture, test, maintenance or operation of the system.
- f. Chemical hazards. (e.g., flammables, corrosives, carcinogens or suspected carcinogens, systemic poisons, asphyxiants, including oxygen deficiencies, respiratory irritants, etc.).
- g. Physical hazards. (e.g., acoustical energy, heat or cold stress, ionizing and non-ionizing radiation).
- h. Biological hazards. (e.g., bacteria, fungi, etc.).
- i. Ergonomic hazards. (e.g., lifting requirements, task saturation, etc.).
- j. Any Hazardous Material requiring MSDS.

C.10.2.2 The assessment shall also address:

- a. System, facility and personnel protective equipment design requirements (e.g., ventilation, noise attenuation, radiation barriers, etc.) to allow safe operation and maintenance. When feasible engineering designs are not available to reduce hazards to acceptable levels, alternative protective measures must be specified (e.g., protective clothing, specific operation or maintenance

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 15 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

practices to reduce risk to an acceptable level).

b. Potential non-or less hazardous material substitutions and projected handling and disposal issues. The HHA will discuss the rationale for using a hazardous material and long term effects (such as potential for personnel and environmental exposure, handling and disposal issues/requirements, protection/control measures, and life cycle costs) over a non-or less hazardous material. The effects and costs should be considered over the life of the systems, including the cost of handling and disposal. Identify potential non-or less hazardous alternatives if they exist and provide a justification why an alternative cannot be used.

C.10.2.3 The HHA part of the assessment shall address the following:

- a. Address the hazardous material data and describe the means for identifying and tracking information for each hazardous material.
- b. The hazardous materials by name(s); the affected system components and processes; the quantity, characteristics, and concentrations of the materials in the system; and source documents relating to the materials.
- c. Under which conditions the hazardous materials can release or emit materials in a form that may be inhaled, ingested, absorbed by living organisms, or leached into the environment and if the materials pose a health threat.
- d. The material hazards and determine reference quantities and hazard ratings. Acute health, chronic health, carcinogenic, contact, flammability, reactivity, and environmental hazards will be examined.
- e. The estimated expected usage rate of each hazardous material for each process or component for the subsystem, total system, and program-wide impact.
- f. The recommended disposition of each hazardous material identified. For any operation, if the quantity exceeds the estimated usage rate, material substitution or altered processes shall be considered to reduce the risk associated with the material hazards. while evaluating the impact on program costs.

C.11 Hazardous Materials Management

The Contractor shall not use hazardous materials as specified in section 3.2.1 of the PD.

The contractor shall prepare Hazardous Material Management Report which, at a minimum, shall identify all hazardous materials required for system production, and sustainment, including the parts/process that requires them. This report should be prepared in accordance with National Aerospace Standard 411, section 4.4.1 per DI-MGMT-81397, CDRL A028.

C.12 Contractor Technical Assistance

The contractor shall be required to provide Contractor Technical Assistance CONUS, OCONUS, and during contingency and non/contingency operations. The contractor shall provide the man-days of service specified in the delivery order. These man-days may be in support of unforeseen events that require support that is not included in any other portion of this contract. We anticipate the effort to include these types of tasks: investigation and diagnosis of problems or issues in the field related to vehicle performance, maintenance, training, and assisting with ICLS effort in Iraq, Kuwait, and Afghanistan. The Contracting Officer shall designate the times and locations of the service to be performed, but will not supervise or otherwise direct activities. The Contracting officer or his authorized representative shall notify the contractor at least 10 days in advance of CONUS travel and 20 days in advance of OCONUS travel of the date representative(s) are required. Instructions and established itineraries will be provided as necessary.

- a. Field Service Representative (FSR). The contractor shall provide FSRs who are thoroughly experienced and qualified to advise and make recommendations to orient and instruct key government personnel with respect to operation, maintenance, and repair of the HMEE Type IIIs and their components.
- b. FSR Personal Data. The contractor shall make available personal data related to the FSRs including documentary evidence such as birth certification and such evidence as is requested by the government installation or area in which services are to be performed. The contractor shall request approval for each FSR and include a statement of qualification for each representative. Government approval shall be limited to granting or denying security clearance for the person(s) named. The contractor shall contact local personnel and comply with local procedures. The local personnel will be identified in the delivery order.
- c. Man-Days. The contractor shall provide man-days of service to locations in both CONUS and OCONUS. The government reserves the right to change the number of days of services to be furnished to the extent necessary to conform to our requirements and shall be obligated to pay for only actual services used.
 - (1) The Man-day rate does not include travel costs (airfare, local car rental, lodging, meals, and incidental expenses) of the FSR while performing the services. The travel costs will be negotiated prior to the issuance of the delivery order, on a firm-fixed-price basis, and not to exceed the Joint Travel Regulation.
 - (2) A Man-Day is 8 hours. The representative is to work no more than 8 hours per day, 40 hours per week, unless otherwise

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 16 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

negotiated. A Man-day of service includes any period during which the representative is delayed or prevented from performing any task only if the delay or non-performance is solely the government's fault. Man-Day(s) of service includes travel time for initial travel from contractor's facility to site of work, for travel between sites of work, and to contractor's facility. It also includes any time that the FSR is preparing required reports at the work site and we can verify the time involved in writing the report.

(3) Saturday/Sunday. When work is not performed on a Saturday/Sunday, and the representative is on site, a man-day shall be charged at the Saturday/Sunday man-day per diem rate only.

(4) Holidays. The government will pay for federal holidays in addition to the actual days worked at the Man-day rate established. The government is not responsible for vacation and other holidays and sick leave pay.

(5) Emergency Leave. The government is not responsible for any emergency leave that the contractor may grant to the FSR while performing work under this contract. The government is responsible for actual days worked by any qualified contractor representative. It is immaterial whether the same representative completes the assignment. The negotiated price for travel costs will include only one complete round-trip transportation and travel costs between sites of work per assignment.

d. Contract Field Service Report/Field Service Representative (FSR) Reports

Each FSR shall prepare and deliver via e-mail a report in accordance with CDRL A029 following completion of each assignment covering his activities.

C.13 Reserved

C.14 Data Rights

Data rights for the following items will be determined in accordance with DFARS 252.227-7015(b) (1) (iv),:

- HMEE Type III supplemented commercial manuals and ETMs (-10, -23, -23P)
- NET - Operator training materials
- NET - Maintenance training materials
- Diagnostic software

C.15 Camouflage Line Art Drawing

The contractor shall provide line art drawings for the HMEE Type III in accordance with CDRL A030. The scale shall be no less than 1/8 inch equals one foot. The contractor shall prepare separate data depicting the following views:

- a. front
- b. back
- c. right side
- d. left side
- e. top

All camouflage line art data shall include length, width, and height dimensions relative to each other and shall be detailed to the extent that all surface features of the item that cover one square inch or more of area are clearly delineated to scale. The lower right hand corner of each drawing shall contain the following information:

- a. nomenclature of the item depicted
- b. view depicted
- c. contract number

C.16 Operator Armor Protection Feasibility Study

a. Background

Ballistic protection (armor) to the operator portion of the cab is required to increase operator survivability for the HMEE Type III. The armored cab shall provide complete operator protection against small arms, Improvised Explosive Devices (IEDs) and blast and fragmentation from other munitions. The protection level shall be per Table 5, Protection Class 3 found in memorandum Analysis of Threat Projectiles for Protection of Light Tactical Vehicles, Director, ARL, APG, MD 2100-5066. It is desired that the armor ballistic requirements have the least degradation to the Roll Over Protection System (ROPS) and the Falling Object Protective Structure (FOPS) as

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 17 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

possible. The design approach for the armor cab shall be either:

- 1) A-kit/B-kit armored cab. The A-Kit consists of permanent mounting provisions along with any vehicle modifications required to accept the armor package (e.g. suspension changes due to the increased weight of the armor kit). The A-kit shall be installed during production on every vehicle. The B-Kit shall consist of armor components that will be mounted on the vehicle to provide operator survivability. The armor components shall be installed on the vehicle by two soldiers using minimal tools and organic support.
 - 2) Interchangeable armored cab. The interchangeable armored cab shall meet the transportability criteria as identified in PD paragraph 3.4.3. The interchangeable armored cab is defined as having the ability to be installed/removed on any vehicle of the same type.
- b. Feasibility Study. In accordance with CDRL A032, the contractor shall prepare a feasibility study on adding ballistic protection (up-armor) to the operator portion of the cab to increase operator survivability as outlined above. The study shall include the impact to the vehicles and its subsystems (i.e., suspension, drive train, hydraulics) performance relating to speed, lift capability, center of gravity, vehicle reliability, visibility, transportability, human factors, and safety (ROPS/FOPS). The study shall also address any degradation in the vehicles ability to perform its intended mission and provide a rough cost estimate for any required changes. The contractor shall also perform a trade-off analysis on the impacts of designing the armored cab using the A-kit/B-kit approach vs. an interchangeable armor cab. The government will decide which design solution to pursue.
- c. Once the government has chosen the design approach, the parties will negotiate the design effort as a separate action. The contractor will be responsible for the design, the development of a Technical Data Package (TDP), installation instructions, and the fabrication of a prototype for government test. The government will own full data rights to the TDP.

C.17 Armor Development

The contractor shall be responsible for the development of the Add on Armor (AoA) required to provide protection to the operator of the up-armored HMEE-III. The up-armor vehicle is intended to protect the operator and, by default, components inside of the vehicle cab. There is no intent to protect components outside of the cab. The deliverables for this development effort will include:

- Two complete vehicles with A-kit and B-kit for automotive testing
- One complete Cab assembly for ROPS/FOPS testing
- Opaque and transparent armor coupons for ballistic testing
- Door assembly for ballistic testing
- Drawing package for B-kit
- Technical Data Package for B-kit
- Installation Instructions for B-kit
- Trade-off Analysis
- Safety Assessment Report

C.17.1 Security

The contractor and/or subcontractor are required to have access to classified information. The contractor and/or subcontractor shall have established the appropriate facilities and management controls up to the secret level. The contractor personnel assigned to this effort shall have valid secret level security clearances. A DD Form 254, Contract Security Classification Specification is included in Attachment 006. The contractor shall abide by the provisions of the Security Classification Guide, at Attachment 007, which is the supporting memorandum for the DD form 254, Contract Security Classification Specification.

C.17.2 Armor Development Effort

- The contractor shall develop the AoA comprised of a substructure and mounting provisions for the armor (the A-kit), replaceable opaque and transparent armor pieces (the B-kit), and modifications to the parent vehicle or additional equipment as necessary to meet safety, human factors, and vehicle performance requirements. The design shall consider:
- Maximizing commonality of components with existing Crew Protection Kits for the Tactical Wheeled Vehicle fleet and the AoA Construction Equipment fleet, such as windows, windshield, hinges, latches, frames, armor composition, mounting system, etc.
 - Minimizing impact on the operation and effectiveness of the vehicle/system.
 - Minimizing configuration changes to the base vehicle to accommodate the additional weight of the armor.
 - Maximizing commonality of hardware and minimizing number of installation tools.
 - The use of proven materials, processes and techniques to minimize test requirements.
 - Maintenance using only the tools found in the general mechanics tool kit and equipment available at unit level (NSN for the

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 18 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

General Mechanics Tool Kit, Auto is 5180-00-177-7033).

C.17.2.1 Lessons Learned

The US Army has learned some important lessons on other armor programs. These lessons learned are being provided to the Contractor as guidance only. These lessons learned are entitled: "Lessons Learned on Tactical Wheeled Vehicle Armor Kit Designs" (Attachment 008) and Safety/Human Factors Considerations when Armor Protection Kits are applied (Attachment 009). The contractor shall not include any design features that contradict any of these lessons learned without government approval. In addition to these lessons learned the US Army Research Lab and US Army Engineer School have provided recommendations on the proposed armor solutions. These recommendations are provided in Attachment 010 entitled: Army Research Lab Memorandum on Proposed Armor Solutions and Attachment 011 entitled: Maneuver Support Center Memorandum on Proposed Armor Solutions.

C.17.2.2 Protection Level

The Armor Solution shall be designed to provide complete operator protection in all directions against blast and fragmentation to Protection Class 2 in accordance with Table 5 Protection Classes for Light Tactical Vehicle Development of Army Research Labs (ARL) report entitled Analysis of Threat Projectiles for Protection of Light Tactical Vehicles, ARL-RP-89 dated December 2004 (Attachment 012).

C.17.2.3 Trade-Off Analysis

The contractor shall perform a trade-off analysis based on the feasibility study performed in C.16. The analysis shall include: an engineering assessment of the impact of the AoA to the vehicle and its subsystems performance (for example: tires, drive train, hydraulics, electrical power, air conditioning system) relating to speed, load capability, center of gravity, vehicle reliability, vehicle maintainability, visibility, transportability, and safety. The contractor shall also estimate differences between the vehicle pre-AoA performance capabilities and post-AoA performance capabilities and propose measures to mitigate degraded performance. The contractor shall identify the changes to limitations on transportability of the up-armored HMEE-III compared to the base vehicle. The Contractor shall provide data analysis to support the Government; showing how the up-armored HMEE-III will meet the air, highway, rail and marine (sea lift and amphibious) transportability requirements. The information shall also include an analysis and description of vehicle preparation procedures and average times to complete for transportability. The contractor shall deliver the trade-off analysis in a form that identifies the safety, risk, and cost impacts in accordance with CDRL A035.

C.17.2.4 Armor Design

C.17.2.4.1 The armor protection shall be provided in the form of a two part A/B operator protection kit that together, meets the total operator protection requirements. The A-kit shall consist of a non-removable portion of integral components built into the base vehicle, including any mounting provisions which would be required for the installation of the B-kit. The B-kit shall consist of all other components that need to be installed on the HMEE-III to meet the complete operator protection level. The HMEE-III, with the A-kit only shall meet all requirements stated in PD 2346 (Attachment 001), without degradation.

C.17.2.4.2 The design of the up-armor HMEE-III shall include opaque armor, transparent armor, armor support provisions, doors with latching mechanism(s) and a separate, emergency egress (in case of vehicle rollover). The emergency egress shall allow escape in the event that the cab door is inaccessible or inoperable using standard tools that would be available in an emergency situation (e.g., mounted or stored on vehicle). The design of the up-armor HMEE-III shall include alterations to existing vehicle systems and components as necessary for safe operation (e.g. longer wiring harnesses, hoses, etc.).

C.17.2.4.3 Operator Cooling

The up-armor HMEE-III shall include means to cool the operator. The operators station shall not exceed 80 degrees F with the armor applied, with an ambient temperature of 120 degrees F, at 25 percent relative humidity. It will be tested IAW SAE J1503. This requirement may be met with a combination of:

- Existing cooling and ventilation systems.
- Insulation.
- Supplemental air conditioning.

If supplemental air conditioning is proposed, the contractor shall use supplemental air conditioners currently used by PM Tactical Vehicles and other Construction Equipment and Material Handling Equipment (CE/MHE) (i.e. Red Dot) for purposes of commonality. (The Government will supply details upon request). The impact of supplemental air conditioning on C-130 transportability requirements (height restriction) shall be addressed in the trade-off analysis (C.17.2.3).

C.17.2.4.4 Roll-Over Protective Structure (ROPS)/Falling Object protective Structure (FOPS)

The up-armored HMEE-III shall meet the same FOPS requirement as the base vehicle, i.e., paragraph 3.5.2.1 of the ATPD 2346 (Attachment 001). It is desired that the up-armored HMEE-III meet the ROPS requirement of the base vehicle, i.e., paragraph 3.5.2.1 of PD 2346.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 19 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

ROPS/FOPS testing will require production of a cab assembly; however, the testing will be performed by the contractor. The cab assembly produced for ROPS/FOPS testing will be part of this contract but will remain in the possession of the contractor.

C.17.2.4.5 MANPRINT

The government will evaluate MANPRINT using MIL-STD-1472F "Department of Defense Design Criteria Standard--Human Engineering," dated 23 August 1999, as a guide. Of particular importance are:

- Noise (at the operators station)
- Toxic fumes (at the operators station)
- Accessibility of controls
- Visibility (specifically for the ability of the operator to carry out mission functions with a minimum of degradation)
- Ingress and egress
- Operator contact with hot surfaces
- Operator ability to communicate with ground guides.

C.17.2.4.6 Paint

All up-armor HMEE-III components shall be coated with CARC as specified in paragraph 3.2.1.5 of ATPD 2346 (Attachment 001). Color for A-kit components shall be the same as for the base vehicle, i.e., as specified in the delivery order. All B-kit components shall be tan, color no. 33446 of FED-STD-595 unless otherwise specified on the delivery order.

C.17.2.4.7 Combat Lock

Doors shall incorporate a device that allows the door to be secured from the inside. The combat lock shall prevent the door from being opened from the outside by enemy personnel and by the force of an IED explosion. An override shall be provided so that emergency personnel outside the cab can open the door. The contractor shall not introduce any new tools to override the combat lock.

C.17.2.4.8 Ballistic Gaps

The contractor shall minimize ballistic gaps to the maximum extent practical when the B-kit components are installed onto the vehicle. Joints and attaching hardware shall be designed to resist separating under blast pressure. All original equipment glass shall be removed from the cab before the B-kit is installed.

C.17.2.4.9 Cautions and Warnings

The contractor shall provide cautions and warnings for the up-armored HMEE-III, affixed onto the inside of the vehicle, to alert the operator of any required notices and/or warnings. In the event an existing label should be covered or removed as a part of the up-armor effort, it shall be relocated to be visible. The contractor shall provide sample cautions and warnings at the Critical Design Review to determine placement on the inside of the vehicle.

C.17.2.4.10 Transportability of Armored Vehicle

The up-armored HMEE-III shall meet all of the transportability requirements in paragraph 3.4.3 of ATPD 2346 (Attachment 001). The only exception is if a supplemental air conditioning unit is required to meet C.17.2.4.3.

C.17.2.5 Prototype Fabrication and Testing

C.17.2.5.1 Prototype Automotive Tests

The contractor shall build two prototype up-armor HMEE-III for automotive tests. The automotive tests will consist of verification that the up-armor HMEE-III, with A-kit installed and with B-kit installed, still meet the requirements of ATPD 2346 (Attachment 001). As required the up-armor HMEE-III will be tested for the impact of the additional weight on durability. The contractor shall ship the prototypes to Aberdeen Proving Ground (APG) within 90 days after contract modification award.

C.17.2.5.2 Material for Kits

The contractor shall use single materials or combinations of materials that have already passed test to the maximum extent possible.

C.17.2.5.2.1 Transparent Armor

The transparent armor shall meet all of the requirements in Purchase Description ATPD 2352, included at Attachment 013 with the exception of the following paragraphs:

Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY

- 3.3.1.1 Low temperature
- 3.3.1.2 High temperature
- 3.3.4 Temperature shock
- 3.3.5 Sun exposure weathering
- 4.5.2 Ballistic qualification test procedure, KE bullet threat, high temperature
- 4.5.3 Ballistic qualification test procedure, KE bullet threat, low temperature

C.17.2.5.2.2 Transparent Armor Standard Sizes

The contractor shall use the transparent armor sizes listed below that are currently used by construction equipment and/or tactical vehicles to the maximum extent possible. For all glass sizes that are not contained on the list below the contractor shall provide written justification prior to the PDR that will be approved/disapproved by the Government on or before the PDR.

Common glass dimensions (inches):

- 6 x 6 x 2.5
- 11 x 29 x 2.5
- 13.03 x 21.53 x 2.5
- 15.50 x 37.50 x 2.5
- 17 x 23 x 2.5
- 19.75 x 35 x 2.5
- 20.25 x 35.25 x 2.5
- 23 x 44 x 2.5
- 25 x 38 x 2.5
- 17 x 39 x 2.5
- 23 x 26 x 2.5
- 10 x 44 x 2.5
- 22.12 x 13.63 x 2.5
- 32 x 19 x 2.5

C.17.2.5.2.3 Transparent Armor Attachment

Transparent armor shall be attached to the vehicle using gaskets that permit use of raw glass. The use of potted glass in frames shall be avoided except when the size or weight of the glass requires lifting aids that are easier to use with a framework.
\\~

C.17.2.5.4 Welding

Welding and weld inspection shall be performed in accordance with AWS D1.1 Structural Welding Code, Steel and AWS D1.2 Structural Welding Code, Aluminum as appropriate. Substitution of an equivalent welding standard may be allowed with prior Government approval.

C.17.2.5.5 Prototype up-armor HMEE-III Ballistic Tests

C.17.2.5.5.1 Prototype Armor Solution Ballistic Test Coupons

No later than 10 days after contract award the contractor shall submit, for each type of armoring material that will be incorporated into the design, ballistic coupons that will be ballistically tested at Aberdeen Proving Ground (APG). The\\~Number of coupons submitted shall be two for each opaque armor solution and four\\~for each transparent armor solution. The opaque coupons shall be 2 feet by 2 feet; transparent coupons shall be 15.75 inches x 15.75 inches. The shipping of the solution samples is the responsibility of the Contractor. If the Contractor chooses to use a solution that is already proven, the ballistic coupon test requirement may be waived by the government.

C.17.2.5.5.2 Prototype Armor Solution Ballistic Test Samples

The contractor shall provide one set of the operating door side assembly, including opaque armor, transparent armor, hinges, latching hardware, and support structure. The Government will test the contractor provided door assembly in order to verify ballistic performance of the up-armor HMEE-III design per the protection requirements stated in C.17.2.2. Testing will also assess armor integration, vulnerability of fasteners and ballistic gaps.

C.17.2.5.6 Contractor Support of Government Test

The contractor shall provide on-site technical assistance at the APG, MD test site to support the up-armored HMEE-III during automotive testing. The contractor shall install/remove components of the A-kit and B-kit as required for testing and repair or replace parts that fail during automotive or ballistic testing within 24 hours and resolve any other up-armor HMEE-III issue. If required, the contractor shall provide any necessary training needed to support testing. The contractor shall respond to all Test Incident Reports generated during test in accordance with the requirements of paragraph E.8.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285MOD/AMD PZ0009	Page 21 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

C.17.2.6 Drawing Packages for Armor

The contractor shall deliver drawings in accordance with CDRL A036. The Government will provide a sample drawing package and installation instructions, which will be used for format and content (See Attachment 014). Prior to delivery to the government, the Contractor may maintain the drawing package in its own format. The drawing data shall be used for the development of installation instructions and drawing part number assignment.

C.17.2.7 Technical Data Package (TDP) for Armor

The contractor shall develop a TDP for the B-kit portion of the up-armored HMEE-III. The TDP shall meet the requirements of MIL-DTL-31000C and ASME Y14.41, as specified in CDRL A037. Drawings shall be in a format compatible with Pro-Engineer when delivered to the Government. Prior to submission to the Government, the Contractor may maintain the TDP in his own format.

C.17.2.8 Part Numbers. The Government will provide part and drawing numbers for the delivered data packages as described in C.17.2.6 and C.17.2.7.

C.17.2.9 Installation Instructions for "B-kit"

C.17.2.9.1 The contractor shall develop, validate, and provide installation instructions as described below, in accordance with CDRL A038. The contractor shall use the drawings developed in C.17.2.6.

C.17.2.9.2 The instructions shall be in a contractor format that is consistent with US Army Technical Bulletin format, per MIL-STD-40051-2.

C.17.2.9.3 The instructions shall be in the form of "start step to end step" instructions. The instructions shall be written to maximize the efficiency of the installation process. The contractor shall validate the installation instructions, during installation of the second prototype kit at the contractors facility prior to shipment. The Government will observe and verify the installation. Installation instructions shall be written so that the kits can be installed at Army organic (unit) level. The contractor shall advise the Government of the date of validation seven days prior to validation.

C.17.2.9.4 The instructions shall contain clear illustrations of each step. Hardware and other items, which could be installed backwards, shall be clearly shown in the proper orientation. The use of color digital photos and line art is acceptable. The after installation condition of the vehicle shall be clearly illustrated.

C.17.2.9.5 The instructions shall contain an Illustrated Parts Breakdown (IPB) of all components, assemblies and hardware. The IPB shall utilize clear and concise line drawings. The IPB shall be similar in format to the current US Army Repair Parts and Special Tools List (RPSTL), in accordance with MIL-STD-40051-2.

C.17.2.9.6 Instructions shall include notes, cautions and warning statements as appropriate. In particular, the proper handling, storage and cleaning of transparent armor shall be included. Instructions shall contain a list of tools; manpower and support equipment requirements needed to accomplish each task.

C.17.3 Program Reviews and Documentation

C.17.3.1 Start of Work Meeting/Preliminary Design Review (PDR)

Not later than 30 days after contract award the contractor shall host a start of work meeting concurrent with the Preliminary Design Review at the contractors facility. At this meeting, the contractor shall present a schedule for armor development in accordance with CDRL A039. During presentation of the schedule the contractor shall address the use of tools, collaborative environment, modeling and simulations as applicable. The contractor shall also present an overall plan, general design strategy, and a mock-up of the proposed operator's field of-view area for the system. The Government will review the proposed field-of-view area during the PDR, prior to the fabrication of the prototype up-armored HMEE-III. The type of mock-up (wood, paper, etc.) shall be determined by the contractor. If the contractor needs to purchase materials before the PDR, a written request for permission must be submitted to the PCO for approval.

C.17.3.2 Critical Design Review (CDR)

Prior to the start of the prototype fabrication/assembly, the contractor shall conduct a CDR no later than 30 days after PDR at its facility. The contractor shall not purchase any materials to begin fabrication of the prototypes until the government approves the final design.

C.17.3.3 Teleconferences

The contractor shall conduct, if required, a bi-weekly teleconference or video teleconference with the government. The government and the contractor shall jointly prepare the minutes from the teleconferences. The contractor shall immediately report to the Government lead-time issues that may impact schedule. The contractor will make recommendations for alternate approaches.

CONTINUATION SHEET	Reference No. of Document Being Continued		Page 22 of 23
	PIIN/SIIN W56HZV-05-D-0285	MOD/AMD PZ0009	
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY			

C.17.3.4 Ballistic Test Meeting

If required, the contractor shall host a pre and post ballistic test meeting at its facility.

C.17.5 Safety Assessment Report (SAR)

The contractor shall update the SAR (C.10.2) to reflect any changes to the vehicle as a result of the up-armor effort in accordance with CDRL A040. The report shall identify the hazards resulting from the application of the A-kit and/or B-kit, the likelihood of occurrence, the severity of resulting injury/ damage and the mitigation actions taken. Hazards that have severe consequences and cannot be eliminated by design changes shall be clearly identified. An assessment of vehicle stability and an estimation of operational limitations resulting from the addition of the AoA up-armor HMEE-III shall be included in the report.

*** END OF NARRATIVE C 0001 ***

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-D-0285 MOD/AMD PZ0009	Page 23 of 23
Name of Offeror or Contractor: CNH AMERICA LIMITED LIABILITY		

SECTION I - CONTRACT CLAUSES

<u>Status</u>	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
I-1 CHANGED	252.217-7027	CONTRACT DEFINITIZATION	OCT/1998

(a) A Letter Contract is contemplated. The Contractor agrees to begin promptly negotiating with the Contracting Officer the terms of a definitive contract that will include (1) all clauses required by the Federal Acquisition Regulation (FAR) on the date of execution of the undefinitized contract action, (2) all clauses required by law on the date of execution of the definitive contract action, and (3) any other mutually agreeable clauses, terms, and conditions. The Contractor agrees to submit a Firm Fixed Price proposal and cost or pricing data supporting its proposal.

(b) The schedule for definitizing this contract action is as follows:

Beginning Alpha Effort:	03 November 2006
Submission of Proposal:	02 February 2007
Target Date for Final Audit:	30 April 2007
Target Date for Definitization:	01 June 2007

(c) If agreement on a definitive contract action to supersede this undefinitized contract action is not reached by the target date in paragraph (b) of this clause, or within any extension of it granted by the Contracting Officer, the Contracting Officer may, with the approval of the head of the contracting activity, determine a reasonable price or fee in accordance with Subpart 15.4 and Part 31 of the FAR, subject to Contractor appeal as provided in the Disputes clause. In any event, the Contractor shall proceed with completion of the contract, subject only to the Limitation of Government Liability clause.

(1) After the Contracting Officer's determination of price or fee, the contract shall be governed by-

(i) All clauses required by the FAR on the date of execution of this undefinitized contract action for either fixed-price or cost-reimbursement contracts, as determined by the Contracting Officer under this paragraph (c);

(ii) All clauses required by law as of the date of the Contracting Officer's determination; and

(iii) Any other clauses, terms, and conditions mutually agreed upon.

(2) To the extent consistent with paragraph (c)(1) of this clause, all clauses, terms, and conditions included in this undefinitized contract action shall continue in effect, except those that by their nature apply only to an undefinitized contract action.

(d) The definitive contract resulting from this undefinitized contract action will include a negotiated firm-fixed price in no event to exceed \$1,796,860.00.

[End of Clause]